In the Claims

Please amend the claims as shown below:

1. (original) A conjugate which is useful for the treatment of prostate cancer which comprises a cytotoxic agent attached to an oligopeptide, wherein the oligopeptide comprises a sequence of amino acids that is selectively proteolytically cleaved by free prostate specific antigen and wherein the means of attachment is through a hydroxyalkyl-amino chemical linker which is optionally substituted,

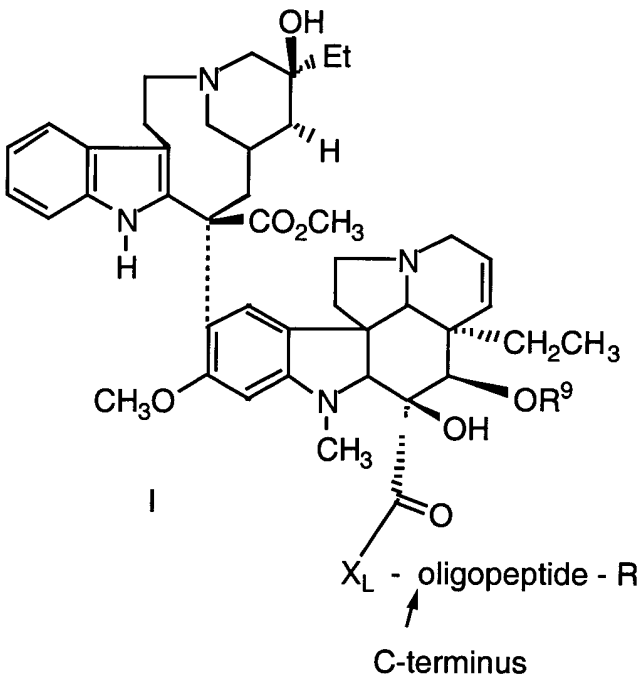
or the pharmaceutically acceptable salt thereof.

2. (original) The conjugate according to Claim 1 wherein the oligopeptide is attached to the chemical linker by an ester bond with that bond comprising the hydroxyl moiety of the chemical linker.

3. (original) The conjugate according to Claim 1 wherein the cytotoxic agent is a vinca alkaloid cytotoxic agent.

4. (original) The conjugate according to Claim 3 wherein the cytotoxic agent is selected from vinblastine and 4-desacetylvinblastine.

5. (original) A conjugate of the formula I:

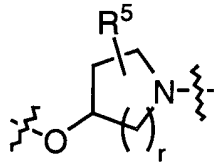


I

wherein:

oligopeptide is an oligopeptide which is specifically recognized by the free prostate specific antigen (PSA) and is capable of being proteolytically cleaved by the enzymatic activity of the free prostate specific antigen,

X_L is selected from - NH - $(CR^3_2)_u$ $(CR^4_2)_v$ - O - and

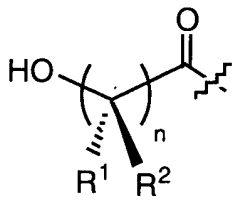


R is selected from

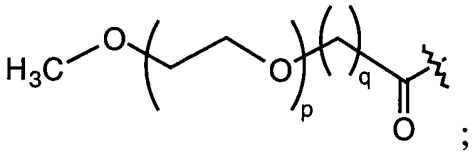
a) hydrogen,

b) -(C=O)R^{1a},

c)

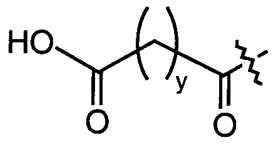


d)



;

e)



;

f) ethoxysquarate; and

g) cotininyl;

R^1 and R^2 are independently selected from:

a) hydrogen,

b) unsubstituted or substituted aryl, unsubstituted or substituted heterocycle, C_3-C_{10} cycloalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, halogen, C_1-C_6 perfluoroalkyl, R^6O-, $R^6C(O)NR^6$-, $(R^6)_2NC(O)$-, $R^6{}_2N$-$C(NR^6)$-, $R^7S(O)_2NH$, CN, NO_2, $R^6C(O)$-, N_3, -$N(R^6)_2$, or $R^7OC(O)NR^6$-,

c) unsubstituted C_1-C_6 alkyl,

d) substituted C_1-C_6 alkyl wherein the substituent on the substituted C_1-C_6 alkyl is selected from unsubstituted or substituted aryl, unsubstituted or substituted heterocyclic, C_3-C_{10} cycloalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, R^6O-, $R^7S(O)_2NH$, $R^6C(O)NR^6$-, $(R^6)_2NC(O)$-, $R^6{}_2N$-$C(NR^6)$-, CN, $R^6C(O)$-, N_3, -$N(R^6)_2$, and $R^7OC(O)$-NR^6-; or

R^1 and R^2 are combined to form - $(CH_2)_s$ - wherein one of the carbon atoms is optionally replaced by a moiety selected from: O, $S(O)_m$, -NC(O)-, NH and $-N(COR^7)-$;

R^{1a} is C_1-C_6-alkyl, hydroxylated C_3-C_8-cycloalkyl, polyhydroxylated C_3-C_8-cycloalkyl, hydroxylated aryl, polyhydroxylated aryl or aryl,

R^3 and R^4 are independently selected from: hydrogen, C_1-C_6-alkyl, hydroxylated C_3-C_8-cycloalkyl, polyhydroxylated C_3-C_8-cycloalkyl, hydroxylated aryl, polyhydroxylated aryl and aryl, or

one R^3 and one R^4 are combined to form a $-(CH_2)_w-$, which is unsubstituted or substituted with one or two substituents selected from OH and C_1-C_6 alkyl; or

an R^3 is combined with another R^3 on the same carbon to form a $-(CH_2)_x-$; or

an R^4 is combined with another R^4 on the same carbon to form a $-(CH_2)_x-$;

R^5 is selected from OH and C_1-C_6 alkyl;

R^6 is selected from: hydrogen, aryl, substituted aryl, heterocycle, substituted heterocycle, C_1-C_6 alkyl and C_3-C_{10} cycloalkyl;

R^7 is selected from: aryl, substituted aryl, heterocycle, substituted heterocycle, C_1-C_6 alkyl and C_3-C_{10} cycloalkyl;

R^9 is hydrogen, (C_1-C_3 alkyl)-CO, or chlorosubstituted (C_1-C_3 alkyl)-CO;

n is 1, 2, 3 or 4;

p is zero or an integer between 1 and 100;

q is 0 or 1, provided that if p is zero, q is 1;
r is 1, 2 or 3;
s is 4, 5 or 6;
t is 3 or 4;
u and v are independently selected from: 0, 1, 2 or 3;
w is 2, 3 or 4;
x is 3, 4 or 5;
y is 1, 2 or 3;

or a pharmaceutically acceptable salt thereof.

6. (original) The conjugate according to Claim 5 wherein:
oligopeptide is an oligomer that comprises an amino acid sequence selected from:

a) AsnLysIleSerTyrGln|Ser (SEQ.ID.NO.: 1),

b) LysIleSerTyrGln|Ser (SEQ.ID.NO.: 2),

c) AsnLysIleSerTyrTyr|Ser (SEQ.ID.NO.: 3),

d) AsnLysAlaSerTyrGln|Ser (SEQ.ID.NO.: 4),

e) SerTyrGln|SerSer (SEQ.ID.NO.: 5);

f) LysTyrGln|SerSer (SEQ.ID.NO.: 6);

g) hArgTyrGln|SerSer (SEQ.ID.NO.: 7);

h) hArgChaGln|SerSer (SEQ.ID.NO.: 8);

i) TyrGln|SerSer (SEQ.ID.NO.: 9);

j) TyrGln|SerLeu (SEQ.ID.NO.: 10);

k) TyrGln|SerNle (SEQ.ID.NO.: 11);

l) ChgGln|SerLeu (SEQ.ID.NO.: 12);

m) ChgGln|SerNle (SEQ.ID.NO.: 13);

n) SerTyrGln|Ser (SEQ.ID.NO.: 14);

o) SerChgGln|Ser (SEQ.ID.NO.: 15);

p) SerTyrGln|SerVal (SEQ.ID.NO.: 16);

q) SerChgGln|SerVal (SEQ.ID.NO.: 17);

r) SerTyrGln|SerLeu (SEQ.ID.NO.: 18);

s) SerChgGln|SerLeu (SEQ.ID.NO.: 19);

t) HaaXaaSerTyrGln|Ser (SEQ.ID.NO.: 20);

u) HaaXaaLysTyrGln|Ser (SEQ.ID.NO.: 21);

v) HaaXaahArgTyrGln|Ser (SEQ.ID.NO.: 22);

w) HaaXaahArgChaGln|Ser (SEQ.ID.NO.: 23);

x) HaaTyrGln|Ser (SEQ.ID.NO.: 24);

y) HaaXaaSerChgGln|Ser (SEQ.ID.NO.: 25);

z) HaaChgGln|Ser (SEQ.ID.NO.: 26);

aa) SerChgGln|SerSer (SEQ.ID.NO.: 106);

bb) SerChgGln|SerPro (SEQ.ID.NO.: 107); and

cc) SerChgGln|SerAbu (SEQ.ID.NO.: 108);

wherein Haa is a cyclic amino acid substituted with a hydrophilic moiety, hArg is homoarginine, Xaa is any amino acid, Cha is cyclohexylalanine, Abu is 2-aminobutyric acid and Chg is cyclohexylglycine;

or an optical isomer thereof.

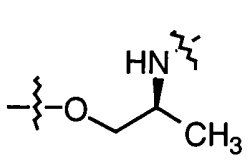
7. (original) The conjugate according to Claim 6 wherein:

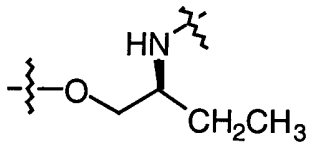
Xaa is alanine, serine or isoleucine; and
Haa is *trans*-4-hydroxy-L-proline;

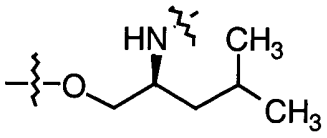
or an optical isomer thereof.

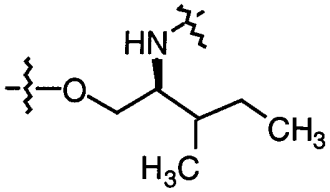
8. (original) The conjugate according to Claim 5 wherein:

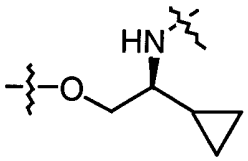
X_L is selected from the following group:

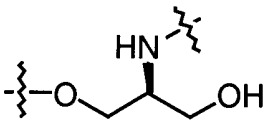

HN
O
CH3

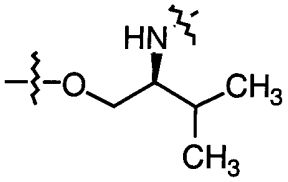

HN
O
CH2CH3

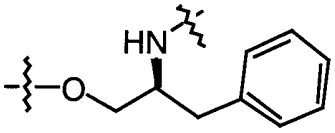

HN
CH3
O
CH3

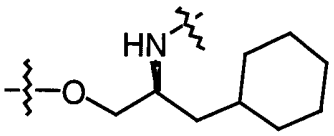

HN
O
CH3
H3C

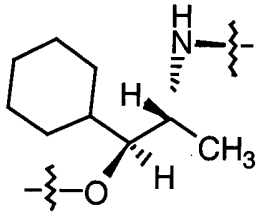
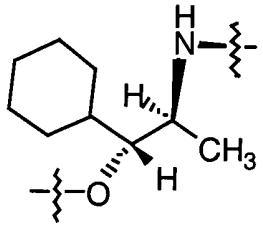
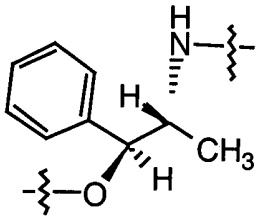
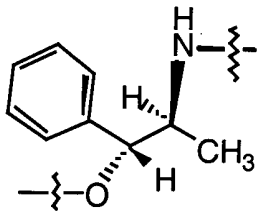
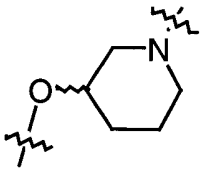
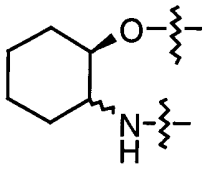
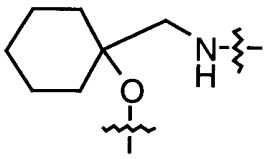
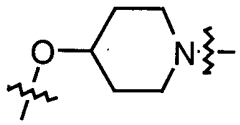
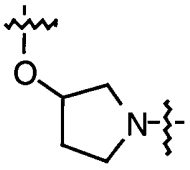

HN
O

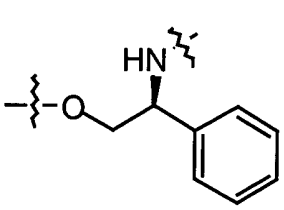

HN
O
OH

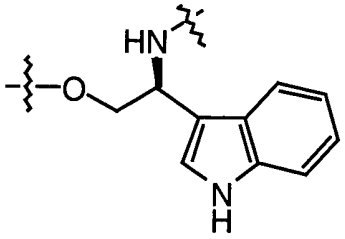

HN
O
CH3
CH3

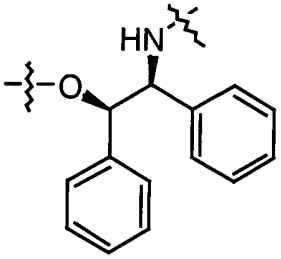

HN
O

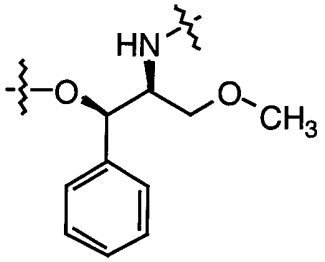

HN
O









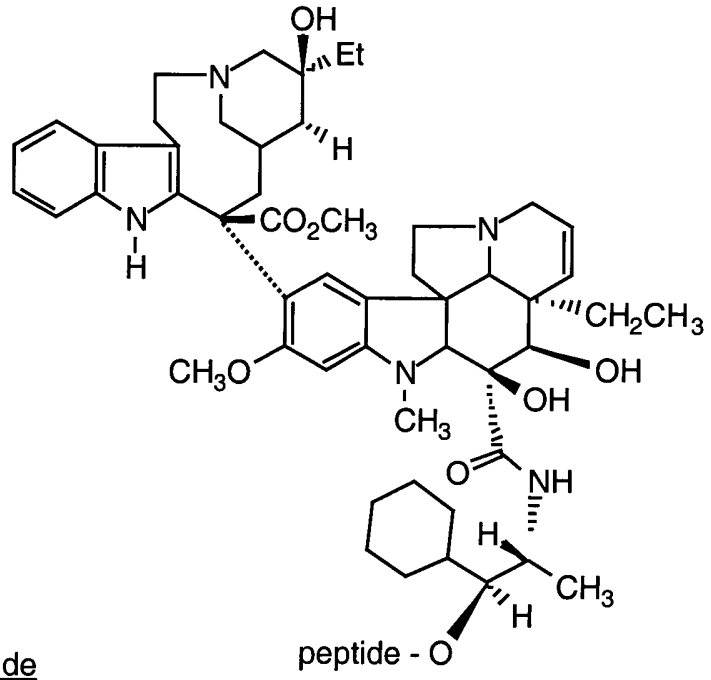
or an optical isomer thereof.

9. (original) The conjugate according to Claim 5 which is selected from:

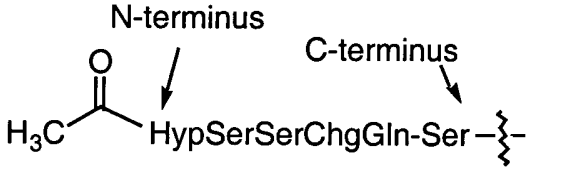
PEPTIDE-VIN CONJUGATE	SEQ. ID.NO.
Ac-(4-trans-L-Hyp)SSChgQ-SPheol-(dAc)-VIN	90
Ac-4-trans-L-HypSSChgQS-cyclopropylalaninol-(dAc)-VIN	91
Ac-4-trans-L-HypSSChgQS-cyclohexylalaninol-(dAc)-VIN	92
Ac-4-trans-L-HypSSChgQS-valinol-(dAc)-VIN	93
Ac-4-trans-L-HypSSChgQS-(HCAP)-(dAc)-VIN TFA salt	82
Ac-4-trans-L-HypSSChgQS-O-3(R)pyrrolidine-(HCAP)-(dAc)-VIN	82
Ac-4-trans-L-HypSSChgQ-SS-(HCAP)-(dAc)-VIN	83
N-hydroxyacetyl-AbuSSChgQ-SP-(HCAP)-(dAc)-VIN	85
Ac-SSChgQ-SP-(HCAP)-(dAc)-VIN	86
Ac-AbuSSChgQ-SP-(HCAP)-(dAc)-VIN	84
Ac-SChgQ-SP-(HCAP)-(dAc)-VIN	94
Ac-AbuSChgQ-SP-(HCAP)-(dAc)-VIN	95
Ac-SChgQSS-Sar-(HCAP)-dAc-VIN	96
Ac-SChgQS-Abu-(HCAP)-VIN	97
Ac-SChgQ-SS(4-trans-L-Hyp)-(HCAP)-dAc-VIN	98
Ac-SChgQSS(PIP)-(HCAP)-dAc-VIN	99
Ac-SChgQSS(HCAP)-dAc-VIN	100
Ac-SChgQSS-gammaAbu-(HCAP)-dAc-VIN	101
Ac-4-trans-L-HypSSChgQSP(HCAP)-VIN	102
Ac-SSChgQ-SSP-(HCAP)-dAc-VIN	103
Ac-SChgQ-SSP-(HCAP)-VIN	104
Ac-AbuSSChgQ-S-(HCAP)-VIN	105

or a pharmaceutically acceptable salt or optical isomer thereof.

10. (original) A compound which is selected from:



peptide



(SEQ.ID.NO.: 82),

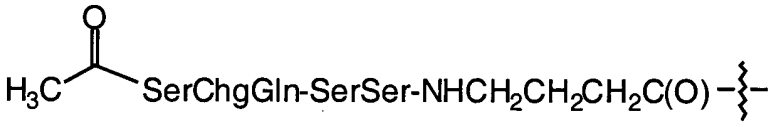
(SEQ.ID.NO.: 83),

(SEQ.ID.NO.: 84),

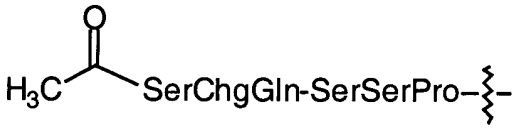
(SEQ.ID.NO.: 85),

peptide

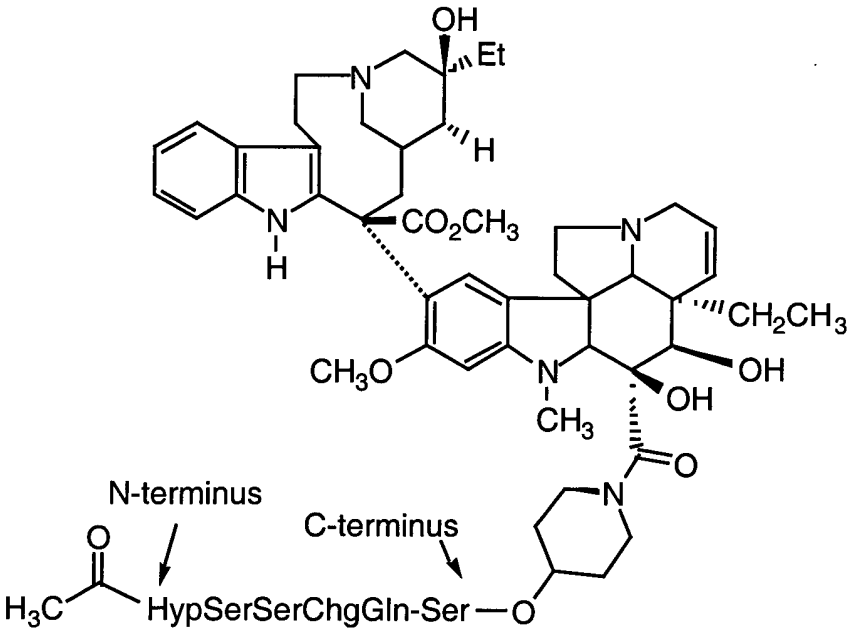
(SEQ.ID.NO.: 86),



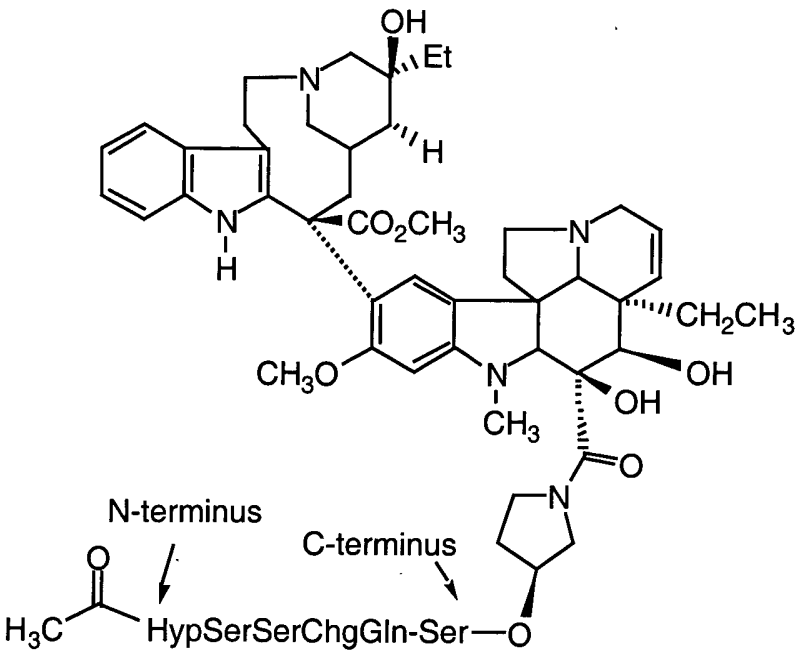
(SEQ.ID.NO.: 101),



(SEQ.ID.NO.: 104),



(SEQ.ID.NO.: 82),



(SEQ.ID.NO.: 82),

or the pharmaceutically acceptable salt or optical isomer thereof.

11. (original) A pharmaceutical composition comprising a pharmaceutical carrier, and dispersed therein, a therapeutically effective amount of a compound of Claim 1.

12. (original) A pharmaceutical composition comprising a pharmaceutical carrier, and dispersed therein, a therapeutically effective amount of a compound of Claim 5.

13. (original) A pharmaceutical composition comprising a pharmaceutical carrier, and dispersed therein, a therapeutically effective amount of a compound of Claim 10.

14. (original) A method for treating prostate cancer which comprises administering to a mammal in need thereof a therapeutically effective amount of a composition of Claim 11.

15. (original) A method for treating prostate cancer which comprises administering to a mammal in need thereof a therapeutically effective amount of a composition of Claim 12.

16. (original) A method for treating prostate cancer which comprises administering to a mammal in need thereof a therapeutically effective amount of a composition of Claim 13.

17. (original) A method for treating benign prostatic hyperplasia which comprises administering to a mammal in need thereof a therapeutically effective amount of a composition of Claim 11.

18. (original) A pharmaceutical composition made by combining the compound of Claim 1 and a pharmaceutically acceptable carrier.

19. (original) A process for making a pharmaceutical composition comprising combining a compound of Claim 1 and a pharmaceutically acceptable carrier.

20. (canceled)

21. (canceled)

22. (canceled)

23. (canceled)

24. (canceled)

25. (canceled)